



Duke Energy Corporation

McGuire Nuclear Station
12700 Hagers Ferry Road
Huntersville, NC 28078-9340

(704) 875-4800 OFFICE

(704) 875-4809 FAX

H. B. Barron
Vice President

October 25, 2000

Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC
20555-0001

Subject: Denial Non-Cited Violation (NCV) - Physical Security
Pursuant to 10 CFR 2.201

Re: Inspection Report 50-369/ 00-05 and 50-370/00-05
Dated [Nov. 4, 2000]*
Cover Letter Dated Incorrect - Later Amended as October 4, 2000

Errata Letter October 11, 2000
C.R. Ogle (USNRC) to H.B. Barron (Duke)

Docket Files: McGuire Nuclear Station Unit 1, NPF-9, 50-369
McGuire Nuclear Station Unit 2, NPF-17 50-370

Duke Energy is in receipt of the above referenced Nuclear Regulatory Commission (NRC) Inspection Report. The subject Inspection Report describes an alleged violation of regulatory requirements associated with the Physical Security Plan at McGuire Nuclear Station. Duke Energy believes the Inspection Report incorrectly characterizes a non-repetitive failure of a single piece of equipment as a violation. Pursuant to guidance in the NRC's Enforcement Policy, Duke does not believe this equipment failure constitutes a violation of a regulatory requirement.

The attached memorandum sets forth the factual and regulatory basis for Duke Energy denying the subject NCV. As a policy matter, Duke Energy chooses to dispute this low level violation to avoid the precedent set by such a violation. Particularly, an isolated failure of a single piece of equipment that did not result in a loss of system function should not be treated as a violation of a regulatory requirement, absent some extenuating circumstances. In this case, equipment redundancy existed as well as the ability to compensate with guards had it become necessary. In addition, the equipment failure was non-repetitive and was entered into the corrective action program. The subject piece of equipment is part of a weekly surveillance procedure that would have revealed the failure had the test been performed at the time of the inspection.

JE14
Public per
Dennis Gordon

U. S. Nuclear Regulatory Commission
October 25, 2000
Page 2

This type of minor equipment degradation does not appear to meet the threshold for a violation of any severity level. Duke respectfully requests that the Staff of the NRC review this matter considering the information provided in the attached memorandum. Questions on this subject can be addressed to Michael T. Cash, Regulatory Compliance Manager (704 875 4117, mtcash@duke-energy.com).



H.B. Barron, Jr.
Site Vice President
McGuire Nuclear Station
Duke Energy Corporation

U. S. Nuclear Regulatory Commission
October 25, 2000
Page 3

cc:

L. Reyes
Regional Administrator
NRC Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

R. Borchardt
Director Office of Enforcement
United States Nuclear Regulatory Commission
Washington, DC
20555-0001

S. Shaffer
Senior Resident Inspector
United States Nuclear Regulatory Commission
McGuire Nuclear Station

K. Barr
Branch Chief
NRC Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

C. Ogle
Branch Chief
NRC Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

A. Boland
Chief Enforcement Officer
NRC Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

**Memorandum Supporting
Denial of a Non-Cited Violation (NCV)
Against the Physical Security Plan**

**Inspection Report 00-05
McGuire Nuclear Station**

I. Background

The Nuclear Regulatory Commission (NRC) conducted a security inspection at McGuire Nuclear Station (MNS) from September 11, 2000 until September 14, 2000. The Inspection was conducted by a team and is documented in an NRC Inspection Report.¹ The Inspection Team exited with Duke Energy management on site on September 14, 2000. A single outstanding issue was identified to Duke management and was characterized as a potential violation during the exit. The NRC issued the Inspection Report on October 4, 2000 with the single outstanding issue characterized as a Non-Cited Violation against the Physical Security Plan incorporated into the MNS License.²

Duke Energy herein submits this denial pursuant to 10 CFR 2.201 and the subject Inspection Report cover letter. The factual and regulatory basis of this denial are described in detail in the following sections of this memorandum.

II. Factual Basis of Denial

The essential facts which are not in dispute as described in the Inspection Report are as follows. The MNS security plan is incorporated into the Operating Licenses³ by License Conditions. As such, the security plans are regulatory requirements to the extent they are incorporated into these License Conditions. The License Conditions state, paraphrasing, that Duke Energy will fully implement and maintain in effect all provisions of the approved security,

¹ Inspection Report Number 50-369/00-05, 50-370/00-05 Section 3 Physical Protection

² Refer Inspection Report 00-05 Section 3PP3.2.b

³ McGuire Unit 1 NPF-9 and McGuire Unit 2 NPF-17

contingency and guard training plans. The Physical Security Plan (PSP) which is incorporated into the License Conditions does state, as the Inspection Report notes,⁴

"Fixed CCTV is installed in accordance with manufacturers specifications for alarm assessment and shall be maintained operable for observation of a potential adversary prior to penetration of exterior protected areas. Electronic Switching is provided to direct the alarm station operators attention to the scene of interest."

It is also not disputed that an automatic switching device for the CCTV failed during the inspection. However, Duke disagrees with the Inspection Report characterization of the consequences of this failure and certain descriptions regarding intrusion detection system performance and testing. The Inspection Report states that:

"On September 12, 2000, the fixed CCTV failed to provide the central alarm station (the primary controlling point) operator with the capability to observe an adversary prior to penetrations of exterior protected area barriers."

The Inspection Report describes this equipment failure as the basis of a violation for failure to comply with the PSP. However, the Inspection Report does not fully characterize the existing condition of the CCTV⁵. The Inspection Report does not fully describe the redundancy provided in the CCTV switching system or testing that was performed on a routine basis. The CCTV system is designed to provide the CAS⁶ operator with backup manual electronic switching by keyboard entries. As such, on receipt of the microwave alarm the CAS operator has the capability to manually switch the cameras for the zone of interest to observe the adversary prior to penetration. This manual capability was not affected during the time described in the inspection report. As such, the CAS operator was not without the "capability to observe an adversary prior to penetrations of exterior protected area barriers". The CAS operator did not have an automatic means of switching the CCTV.⁷ The manual switching is accomplished by a simple set of keystrokes at the keyboard console in response to the microwave alarm and can readily be accomplished prior to penetration of the protected area barriers.

⁴ PSP Paragraph 2.0, Inspection Report 3PP3.2.b

⁵ CCTV - Close Circuit TV

⁶ CAS - Central Alarm Station

⁷ The Inspection Report Section 33P3.2.b makes reference to a failure of video capture related to the switching device failure. The video capture system is a separate subsystem which is unaffected by the switching device failure. The description of failures in multiple zones may also lead the reader to conclude that multiple pieces of equipment failed as related to this violation. The failure of a single switching device is the only failure related to the violation. This same device serves the same function for each microwave zone discussed in the Inspection Report. Therefore, the repeated descriptions of failures in various zones is a reflection of the failure of the single switching device.

Therefore, by failing to account for the manual switching capability in the CAS the NRC Inspection Report inappropriately characterizes the switching device failure as a total loss of system function. This is not correct as described above. The CAS operator was capable of using manual switching to observe adversaries prior to entry.

III. Regulatory Basis of Denial

III.A. Secondary Alarm Station Automatic Switching

If Duke were to accept that a failure of the switching device resulted in a loss of ability to observe an intruder prior to penetration⁸, Duke believes that such circumstances do not constitute a violation of a regulatory requirement. There are two primary reasons Duke has for this position outlined in sections III.A and III.B. Paragraph 8.2 of the PSP as quoted by the NRC Inspection Report states in part (emphasis added)

"Fixed CCTV is installed in accordance with manufacturers specifications for alarm assessment and shall be maintained operable for observation of a potential adversary prior to penetration of exterior protected areas. Electronic Switching is provided to direct the alarm station operators attention to the scene of interest."

The PSP indicates that automatic electronic switching is provided to direct the alarm station operators attention to the scene of interest. In stating the apparent violation the NRC Inspection Report mis-states this switching requirement by qualifying this as a central alarm station requirement. The Inspection Report states in part, "... failed to provide the central alarm station (the primary controlling point) operator with the capability ". This statement does not fully credit the presence of the SAS⁹, where additional alarm operators are stationed for security. The SAS alarm station operators are provided with a redundant automatic CCTV switching device. This automatic device was not impaired during the time of the inspection. The Inspection Report mentions the fact that the SAS was not affected during the Inspection. However, the Inspection Report did not fully describe the redundant capability that this provided the security force and did not allow Duke credit for this redundant feature. The Inspection Report draws the conclusion, without a supporting basis, that automatic switching for the CAS is the only design feature for which Duke can take credit in identifying intruders prior to entry. This is contrary to the language of the PSP, which refers to alarm station operators, which can be

⁸ Duke does not accept this proposition.

⁹ SAS - Secondary Alarm Station

CAS or SAS operators. The Inspection Report states that the CAS is the primary controlling point, which is a statement of fact. However, the fact that the CAS is the primary controlling point does not imply that redundant SAS capability can not be credited in the PSP.

The Inspection Report does not provide a regulatory basis which would indicate that Duke can not take credit for the automatic switching capability provided in the SAS. This capability allows alarm operators to observe intruders prior to penetration. One of the obvious purposes of the SAS is redundant capability to accommodate equipment malfunctions. As such, a failure in the CAS properly accommodated by redundancy in the SAS should not be considered a functional failure of the physical protection plan. Absent a regulatory basis to the contrary, Duke respectfully suggests that such a failure of automatic switching in the CAS alone would not be a violation of the PSP as incorporated into the License Condition.

III.B. Compensatory Actions for Equipment Failure

Further, the Inspection Report fails to note that PSP section 8.2.1 provides for compensatory measures in the event of CCTV equipment failures. Automatic switching is described in the PSP as a sub-component of the CCTV system. A loss of CCTV functionality would not be a violation of the security plan if it was properly compensated. The security plan was written with the recognition that equipment can be out of service. Equipment in the intrusion detection systems (IDSs) can be non-functional due to failure or for maintenance activities. In such cases, the PSP requires that proper compensatory measures be put into place to provide the capability to detect intrusions by other means.

The Inspection Report could lead to the position that the loss of any piece of IDS equipment would be a violation of a regulatory requirement regardless of whether the condition was properly compensated. This ignores the overall construction of the security plan which provides for equipment failures or removal from service. Arguably, a failure of IDS equipment not properly compensated would be a violation of the PSP. In the case of this denial however, the Inspection Report notes that immediate compensatory actions were taken.¹⁰

In addition, Duke would agree that in certain cases IDS equipment failures may constitute violations of other regulatory requirements. However, in this case Duke has reviewed the past testing data associated with the switching device for the CAS and found this to be an isolated non-repetitive failure. A testing procedure is performed on a weekly basis to verify system

performance on equipment of which the subject switching device is a component.¹¹ Steps from that procedure state the following:

- 9.1 Walk perpendicular to the microwave/infrared zone and verify intrusion alarm in CAS and SAS.
- 9.2 Verify correct camera switch by video switcher to alarm video and PICS

Step 9.2 above accomplishes the specific steps to verify that the video switching device is properly swapping the CCTV. The procedure has been performed weekly for a number of years and a review of records back to January 2000 did not reveal another single failure of the video switching device. In addition, the procedure was performed on September 10, 2000 approximately 2 days before the failure during the inspection. As such Duke believes this is an example of an isolated failure of equipment, found in between surveillance tests, which was properly compensated as required by the security plan. Duke believes that such occurrences should not be treated as a violation of any regulatory criteria.

IV Proper Item Disposition

As described above, the failure of a single video switching device does not result in a loss of security CCTV system operability. Also as described above, this failure did not constitute a failure to meet a regulatory requirement and is therefore not a violation of any severity level. Such a failure is best characterized as a minor degradation in the system for which corrective actions should be taken. Since this failure did not result in a loss of function, was non-repetitive in nature and had no actual or potential consequences it does not constitute a finding as described in NRC Inspection Manual Chapter Section 610.¹² Duke believes this issue should be

¹⁰ Inspection Report Section 3PP3 .2.b It is arguable whether the actions were actually compensatory or simply system operation in manual or use of the SAS as an alternative means of operation. However, the point is in this context, that the Inspectors found that compensatory actions were immediately taken.

¹¹ Procedure EXAT-01 "Testing of Microwave/Infrared System"

¹²NRC Inspection Manual - Criteria for Documenting a Finding 1. Determining the Significance of Negative Findings. The following questions should be used to determine whether or not a finding should be documented in the inspection report: Does this finding have any actual impact (or any significant potential for impact) on safety? Is this finding illustrative of a programmatic licensee problem that could have a safety or regulatory impact? Does this finding provide insights on an equipment, system, or human performance problem? Could this finding be viewed as the possible precursor to a significant event? If the licensee takes no action on this matter, will the condition worsen (i.e., will the safety significance increase)? If this finding recurs, will its recurrence result in more significant or additional safety concerns? Will this information be useful in assessing the long-term performance of this licensee program or functional area? Does this finding have generic significance? If the answer to any one of these questions is "yes," the finding should be documented in the inspection report. If the answer to all questions is "no," the finding normally should not be documented.

dispositioned as a non-documented inspection observation as described in Section 610 of the Inspection Manual.

V Conclusion

Characterization of isolated single component failures properly entered into licensees corrective action program as violations is inconsistent with the NRC Enforcement Policy. Further, treating such a minor problem as an inspection finding or violation is contrary to the Inspection Manual and the premise of the new oversight process. IDS equipment performance is monitored through the performance indicator system and additional regulatory characterization by the inspection process is redundant, not risk informed and serves no clear regulatory purpose.